W. L. GORE & ASSOCIATES, INC
CHERRY HILL
PERMIT NO. 24-015-0079
PART 70 OPERATING PERMIT FACT SHEET
DRAFT 2017

BACKGROUND

W. L. Gore & Associates, Inc. is a worldwide manufacturing corporation with headquarters in Newark, Delaware. W. L. Gore & Associates, Inc.–Cherry Hill facility is located at 2401 Singerly Road in Cecil County, Maryland. The Cherry Hill facility operations utilize fluoropolymer material (FPM) forming and stretching equipment. The primary SIC for this facility is 3087

The following table summarizes the actual emissions from the Cherry Hill facility based on its Annual Emission Certification Reports:

Table 1: Actual Emissions

Year	NO_X (TPY)	SO_X (TPY)	$PM_{10}/PM_{2.5}$ (TPY)	CO (TPY)	VOC (TPY)	Total HAP (TPY)
2016	9.115	0.048	0.939/0.158	5.75	20.03	0.000068
2015	8.198	0.046	0.925/0.144	5.22	19.97	0.000068
2014	12.426	6.304	1.077/0.178	5.73	20.89	0.000669
2013	12.295	5.703	0.989/0.157	5.38	19.75	0.000233
2012	12.718	4.253	.0970/0.163	6.10	19.36	0.002113

The major source threshold for triggering Title V permitting requirements in Cecil County is 25 tons per year for NO_X, 25 tons per year for VOC, and 100 tons per year for any other criteria pollutants. The facility's potential to emit VOC emissions are greater than the major source threshold, therefore, W. L. Gore & Associates, Inc.–Cherry Hill facility is required to obtain a Title V-Part 70 Operating Permit under COMAR 26.11.03.01.

The Department on July 3, 2017 received W. L. Gore & Associates, Inc.–Cherry Hill facility's Part 70 renewal permit application. An administrative completeness review was conducted and the application was deemed to be administratively complete. A completeness determination letter was sent to the W. L. Gore & Associates, Inc. – Cherry Hill site on July 7, 2017 granting the Cherry Hill facility an application shield

CHANGES AND MODIFICATIONS TO THE PART 70 OPERATING PERMIT

The following changes and/or modifications have been incorporated into the renewal Title V – Part 70 Operating Permit for Cherry Hill Plant:

Additions to the facility

Date Issued	Registration No.	Description
April 24, 2013	015-0079-6-0324	Extruder (CH2101) located in the Filled Products Area
April 30, 2014	015-0079-4-0223	Boilers: Mod of two (2) existing Burnham (ea. 9.45 MMBtu/hr) boilers to burn natural gas as primary fuel and No. 2 fuel oil as backup
	015-0079-4-0224	
April 2, 2015	015-0079-4-0200	Boiler: Mod of Weil McLain boiler rated at 8.6 MMBtu/hr heat input to burn natural gas as primary fuel and No. 2 fuel oil as backup.
October 5, 2015	015-0079-6-0348	PTC for Fluoropolymer Material (FPM) process for shaping and forming.(CH20031600)
May 16, 2916	015-0079-6-0351	Extruder (CH2262) located in the Filled Product Manufacturing Area
	015-0079-6-0352	Extruder (CH13831) located in the R&D Area.
	015-0079-6-0353	Extruder (CH2013) located in the FPM Manufacturing Area
March 9, 2017	015-0079-6-0361	Fluoropolymer Material (FPM) extruder (CH20038276) located in the R&D Area
July 10, 2017	015-0079-6-0126	Mod of FPM Drying oven (TD2 dryer CH2383) to switch fuel from propane to natural gas
August 3, 2017	015-0079-6-0363	PTC for electric oven to dry and heat treat filled FPM products.
January 24, 2018	015-0079-4-0223	Boilers: Mod. of two (2) existing (ea. 9.45 MMBtu/hr) boilers to increase the rating to 10.4 MMBtu/hr and remove the No. 2 fuel oil back up capability.
	015-0079-4-0224	
	015-0079-5-0149	Boiler: PTC for one (1) Burnham 10.4 MMBtu/hr natural gas fired boiler equipped with low NO_X burners
	015-0079-6-0365	FPM oven for dry and heat treating.
February 8, 2018	015-0079-6-0367	Extruder (CH20032269) located in the Filled Product Area

Deletion from the facility

The following installations were decommissioned from the facility in 2018:
Boiler: Weil McLain No.2 fuel oil fired rated at 4.9 MMBtu/hr heat input **(4-0156)**
Boiler: Weil McLain natural gas/No.2 fuel oil fired rated at 8.6 MMBtu/hr heat input **(4-0200)**

National Emission Standard for Hazardous Air Pollutants (NESHAP) – 40 CFR Part 63

Cherry Hill facility is not a major HAP Emissions Source. Instead it is an area HAP emission source and is subject to the following MACTs:
Subpart ZZZZ—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

COMPLIANCE ASSURANCE MONITORING

W.L. Gore & Associates, Inc.-Cherry Hill conducted a Compliance Assurance Monitoring (CAM) analysis for the facility and determined that certain Emission Units: EU3-2 is subject to the (CAM) Rule 40 CFR Subpart 64.

GREENHOUSE GAS (GHG) EMISSIONS

W.L. Gore & Associates, Inc.-Cherry Hill facility emits the following greenhouse gases (GHG) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHG originate from various processes (i.e., waste decomposition and landfill gas fugitives, gas flaring, internal combustion engines, and garage boilers) contained within the facility premises applicable to Cherry Hill facility. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. The emission certifications reports for the years 2016, 2015, 2014, and 2013 showed that Cherry Hill facility is not a major source (threshold: 100,000tpy CO_2e) for GHG (see Table 3 shown below). The Permittee shall quantify facility wide GHG emissions and report them in accordance with Section 3 of the Part 70 permit.

The following table summarizes the actual emissions from W.L. Gore & Associates, Inc.-Cherry Hill Plant based on its Annual Emission Certification Reports:

Table 3: Greenhouse Gases Emissions Summary

GHG	Conversion factor	2016 tpy CO_2e	2015 tpy CO_2e	2014 tpy CO_2e	2013 tpy CO_2e
Carbon dioxide CO_2	1	10,434.136	9,553.067	12,050.907	12,159.916
Methane CH_4	25	0.162	0.146	0.132	0.133
Nitrous Oxide N_2O	298	0.455	0.391	0.592	0.591
Total GHG CO_{2eq}		**10,434.752**	**9,553.605**	**12,051.632**	**12,160.641**

EMISSION UNIT IDENTIFICATION

W.L. Gore & Associates, Inc.-Cherry Hill has identified the following emission units as being subject to Title V permitting requirements and having applicable requirements.

Table 4: Emission Unit Identification

Emissions Unit Number	MDE Registration Number	CH Number	Emissions Unit Name and Description	Date of Installation
EU 1-1 Particulate Matter Emitting Units	6-0104	0	Control: Dust Collector	5/2001
		63203	Forming: Mixing and Compounding	7/2002
		62347	Forming: Mixing and Compounding	5/2001
	6-0328	20017616	Forming: High Shears Mixers	8/2013
EU 2-1 Boilers	4-0223	SB1	Boiler: Burnham natural gas fired rated at 10.4 MMBtu/hr heat input	12/2006 Modification 2014 & 2018
	4-0224	SB2	Boiler: Burnham natural gas	12/2006

Emissions Unit Number	MDE Registration Number	CH Number	Emissions Unit Name and Description	Date of Installation
			fired rated at 10.4 MMBtu/hr heat input	Modification 2014 & 2018
	5-0149	SB3	Boiler: Burnham natural gas fired rated at 10.4 MMBtu/hr	2018
EU2-2 Emergency Generator	9-0169	0	EGEN: Emergency diesel fired Generator rated at 800 kW	12/2006
EU 3-1 Shaping and Forming Equipment – General Exhaust.	6-0317	20000806	Forming: Extruder	2012
	6-0318	976		Pre-1990
	6-0324	2101		Pre-1990
	6-0326	1991534		2007
	6-0327	2371		Pre-1990
	6-0348	20031600	Forming: Calendaring Line	10/2015
	6-0351	2262	Forming: Extruder	2016
	6-0367	20032269		2018
	6-0352	13831		2016
	6-0353	2013		2016
	6-0361	20038276		2017
	7-0045	74837		Pre-1990
	7-0045	20006547		2011
EU 3-2 Drying Ovens ventilated to Oxidizer Control System (OSC)	7-0045	1314	Drying: Dryer	Pre-7/1988
	6-0260	1316		Pre-1990
	7-0045	1381		Pre-7/1988
	7-0045	1632		Pre-7/1988
	6-0102	2203		1/1/1995
	6-0131	2204		12/1/1996
	6-0126	2383		10/1/1996 Modification 2017
	6-0276	2404		7/1/1997
	6-0173	2439	Drying: Batch Oven	3/1/1997
	6-0173	2440		3/1/1997
	6-0279	2615		May-99
	6-0311	60265	Drying: Dryer	Mar-12
	6-0278	60648		12/1/1999
	6-0275	74799		Aug-07
	9-0325	20011771		Dec-13
	6-0173	2369	Control: OCS	6/1/1996

Emissions Unit Number	MDE Registration Number	CH Number	Emissions Unit Name and Description	Date of Installation
	6-0173	60535		3/1/1999
	6-0173	62581		1/1/2002
	6-0363	20038790	Drying: Dryer	3/2018
	6-0365	20039595		3/2018
EU 3-3 Batch Ovens to Atmosphere	6-0041	2365	Drying: R&D Oven	Jun-92
	6-0041	2366		Oct-03
	6-0130	2281	Drying: Lab Ovens	Aug-82
	6-0130	2505		May-99

AN OVERVIEW OF THE PART 70 PERMIT

The Fact Sheet is an informational document. If there are any discrepancies between the Fact Sheet and the Part 70 permit, the Part 70 permit is the enforceable document.

Section I of the Part 70 Permit contains a brief description of the facility and an inventory list of the emissions units for which applicable requirements are identified in Section IV of the permit.

Section II of the Part 70 Permit contains the general requirements that relate to administrative permit actions. This section includes the procedures for renewing, amending, reopening, and transferring permits, the relationship to permits to construct and approvals, and the general duty to provide information and to comply with all applicable requirements.

Section III of the Part 70 Permit contains the general requirements for testing, record keeping and reporting; and requirements that affect the facility as a whole, such as open burning, air pollution episodes, particulate matter from construction and demolition activities, asbestos provisions, ozone depleting substance provisions, general conformity, and acid rain permit. This section includes the requirement to report excess emissions and deviations, to submit an annual emissions certification report and an annual compliance certification report, and results of sampling and testing.

Section IV of the Part 70 Permit identifies the emissions standards, emissions limitations, operational limitations, and work practices applicable to each emissions unit located at the facility. For each standard, limitation, and work practice, the permit identifies the basis upon which the Permittee will

demonstrate compliance. The basis will include testing, monitoring, record keeping, and reporting requirements. The demonstration may include one or more of these methods.

Section V of the Part 70 Permit contains a list of insignificant activities. These activities emit very small quantities of regulated air pollutants and do not require a permit to construct or registration with the Department. For insignificant activities that are subject to a requirement under the Clean Air Act, the requirement is listed under the activity.

Section VI of the Part 70 Permit contains State-only enforceable requirements. Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE METHODOLOGY

Emission Units: EU1-1

Particulate Matter Emitting Units:
Forming: Mixing and Compounding (6-0104) & High Shear Mixers (6-0328)

Note: These installations are minor sources of particulate matter. The emission certification for 2016 reported 0.734 tons of PM_{10}.

Applicable Standards and limits:

A. Control of Visible Emissions
COMAR 26.11.06.02C(1) – Visible Emission Standards. "A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity."
COMAR 26.11.06.02A(2) – General Exception. "The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:
(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

Compliance Demonstration
The Permittee shall conduct a monthly 6-minute visual observation of the baghouse exhaust. The visual observation must be conducted while the baghouse is in operation. If no visible emissions are observed in six consecutive monthly observations from the baghouse exhaust, the Permittee may decrease the frequency of visual observations from monthly to quarterly for the baghouse exhaust. If visible emissions are observed during any quarterly visual observation, the Permittee must resume the observation of the baghouse exhaust on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly visual observations. If visible emissions are observed during any observation, the Permittee must conduct an 18-minute test of opacity in accordance with Method 9. The Method 9 test must begin within 24-hour of any observation of visible emissions. The Permittee shall maintain on site a log of the dates and results of visible emissions observations for a period of at least 5 years. **[Reference: COMAR 26.11.03.06C]**
The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" [**Reference: COMAR 26.11.01.07**]

Please Note: The Permittee is now performing observations quarterly on the baghouse.

B. Control of Particulate Matter Emissions
COMAR 26.11.06.03B(1) – Particulate Matter from Confined Sources. "A person may not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/scfd (115 kg/dscm)."

Compliance Demonstration
The Permittee shall update and maintain the preventive maintenance plan for the baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the time frames established in the plan and shall maintain a log with records of the dates and description of the maintenance that was performed. The Permittee shall maintain a copy of the preventive maintenance plan and a record of the dates of and description of maintenance activity performed. The Permittee shall maintain records of the baghouse malfunctions and the corrective actions taken to bring into proper operation. The Permittee shall submit a copy of the preventive maintenance plan, records of maintenance activities and corrective actions taken to the Department upon request. **[Reference: COMAR 26.11.03.06C].**

Emission Units: EU2-1

Boilers:

Two (2) Burnham natural gas fired boilers each rated at 10.4 million Btu per hour heat input and equipped with low NO_X burners. (Boilers #4 & #5) [4-0223 & 4-0224]

One (1) Burnham natural gas fired boiler rated at 10.4 million Btu per hour heat input and equipped with low NO_X burners. (Boiler #SB3) [5-0149]

The Permittee applied and was issued permit to construct for the following:

- 4/30/2014 - Permit to Construct issued for the modification of the two (2) existing (ea. 9.45 MMBtu/hr) boilers to burn natural gas as primary fuel and No. 2 fuel oil as backup.
- 1/24/2018 - Permit to Construct issued for the modification two (2) existing (ea. 9.45 MMBtu/hr) boilers to increase the rating to 10.4 MMBtu/hr and remove the No. 2 fuel oil back up capability. Also addition of one (1) Burnham 10.4 MMBtu/hr natural gas fired boiler equipped with low NO_X burners.

These boilers are subject to the requirements of 40 CFR 60 Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

The natural gas fired boilers are exempt from the requirements of 40 CFR Part 63, Subpart JJJJJJ pursuant to §63.11195(e).

Compliance Status

Per July 13, 2017 Full Compliance Inspection, a certificate of analysis received with each shipment showed a sulfur content of 8 ppm which is less than the standard 0.3 percent by weight (3000 ppm). Also no visible emissions were detected during the inspection.

Applicable Standards and limits:

A. Control of Visible Emissions

COMAR 26.11.09.05A(1) - Fuel Burning Equipment. "A person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity."

COMAR 26.11.09.05A(3) - Exceptions. "Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period."

Compliance Demonstration
The Permittee shall properly operate and maintain the boilers in a manner to prevent visible emissions. The Permittee shall maintain an operations manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates to combustion performance. [**Reference: COMAR 26.11.03.06C].** The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" [**Reference: COMAR 26.11.01.07**]

B. Operational Limits

The three (3) Burnham boilers shall burn natural gas only. **[Reference: MDE Permit to Construct Nos. 4-0223 & 4-0224, 5-0149 Part C(3) issued January 24, 2018]**

Compliance Demonstration
The Permittee shall retain records of plant-wide fuel usage and hours of operation for the boilers on site. **[Reference: MDE Permit to Construct Nos. 015-0079-4-0223 & 4-0224, & 5-0149, Part D]**
The Permittee shall submit records of the quantity of fuel burned with the annual emissions certification report. **[Reference: Title V, Section III, Condition 8**]

Emission Units: EU2-2

Emergency Generator:
One (1) Onan 1200 bhp *(800 kW)* diesel emergency generator. (6-0169)

This emergency generator is subject to the requirements of 40 CFR 63, Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

This emergency generator is not subject to the requirements of 40 CFR 60, Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines since this emergency generator was manufactured April 1, 2006.

Applicable Standards and limits:

A. Control of Visible Emissions
COMAR 26.11.09.05E - Stationary Internal Combustion Engine Powered Equipment.
"(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.
(3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.
(4) Exceptions.
(a) Section E(2) of this regulation does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.
(b) Section E(2) of this regulation does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
(i) Engines that are idled continuously when not in service: 30 minutes;
(ii) All other engines: 15 minutes.
(c) Section E(2) and (3) of this regulation do not apply while maintenance, repair, or testing is being performed by qualified mechanics."

Compliance Demonstration
The Permittee shall properly operate and maintain the emergency generator in a manner to prevent visible emissions. The Permittee shall maintain an operations manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates to combustion performance. [**Reference: COMAR 26.11.03.06C].** The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, Section III, "Report of Excess Emissions and Deviations" [**Reference: COMAR 26.11.01.07**]

B. Control of Sulfur Oxides Emissions
COMAR 26.11.09.07A(1)(c). Sulfur Content Limitations for Fuel. "A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: Distillate fuel oils, 0.3 percent."

Compliance Demonstration
The Permittee shall obtain a certification from the fuel supplier that the fuel oil is in compliance with the sulfur in fuel limitation. **[Reference: COMAR 26.11.03.06C]** The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with this regulation. The Permittee shall report fuel

supplier certifications to the Department upon request [**Reference: COMAR 26.11.09.07C]**

Emission Units: EU2-2 Cont'd

Emergency Generator
One (1) Onan 1200 bhp *(800 kW)* diesel emergency generator. (6-0169)

Compliance Status
Per July 13, 2017 Full Compliance Inspection, annual inspection on the generator was conducted on December 12, 2016.

Applicable Standards and limits:

63.6595 - When do I have to comply with this subpart?
(a) *Affected sources.* (1)" ….. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, **or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.** …..".

§63.6603 - What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.
(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in **Table 2d** to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions
As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

§63.6605 - What are my general requirements for complying with this subpart?

"(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.
(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source."

Compliance Demonstration

§63.6625 - What are my monitoring, installation, collection, operation, and maintenance requirements?

"(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:
(3) An **existing emergency** or black start stationary RICE located at an area source of HAP emissions."

"(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or **an existing emergency stationary RICE located at an area source of HAP emissions,** you must install a non-resettable hour meter if one is not already installed."

"(h) If you operate a new, reconstructed, or **existing stationary engine**, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and **2d** to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation,

whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine."

§63.6640 - How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and **Table 2d** to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and **Table 2d** to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

"(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the

insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
(ii) Not Applicable
(iii) Not Applicable.
(3) Not Applicable
(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity."

§63.6655 - What records must I keep?
"(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;
(2) An existing stationary emergency RICE.
(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart."

"(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines."

"Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable." **[Footnote 2 of Table 2d]**

Emission Units: EU3-1, EU3-2, EU3-3

EU 3-1: Natural FPM Product Area vented through the oxidizer control system.
EU 3-2: Filled FPM Products Area vented through the oxidizer control system.
EU 3-3: FPM Processing Area vented to atmosphere.

Compliance Status
Per July 13, 2017 Full Compliance Inspection, the tanks in the tank farm are equipped with conversation vents. No materials with a vapor pressure greater than 1.5 psia are stored in the tank farm. The facility's Good Operating practices were made available to the Department during the compliance inspection.

Applicable Standards and limits:

Control of VOC Emissions
COMAR 26.11.19.02I – Good Operating Practices, Equipment Cleanup and VOC Storage
"(1) Applicability. The requirements in this section apply to a person who owns or operates an installation that is subject to any requirement in this chapter.
(2) Good Operating Practices.
(a) A person who is subject to this section shall implement good operating practices to minimize VOC emissions into the atmosphere.
(b) Good operating practices shall, at a minimum, include the following:
(i) Provisions for training of operators on practices, procedures, and maintenance requirements that are consistent with the equipment manufacturers' recommendations and the source's experience in operating the equipment, with the training to include proper procedures for maintenance of air pollution control equipment;
(ii) Maintenance of covers on containers and other vessels that contain VOC and VOC-containing materials when not in use;
(iii) Minimize spills of VOC-containing cleaning materials;
(iv) Convey VOC-containing cleaning materials from one location to another in closed containers or pipelines;
(v) Minimize VOC emissions from cleaning of storage, mixing, and conveying equipment;
(vi) As practical, scheduling of operations to minimize color or material changes when applying VOC coatings or other materials by spray gun;
(vii) For spray gun applications of coatings, use of high volume low pressure (HVLP) or other high efficiency application methods where practical; and
(viii) As practical, mixing or blending materials containing VOC in closed containers and taking preventive measures to minimize emissions for products that contain VOC.
(c) A person subject to this regulation shall:

(i) Establish good operating practices in writing;
(ii) Make the written operating practices available to the Department upon request; and
(iii) Display the good operating practices so that they are clearly visible to the operator or include them in operator training.
(3) Equipment Cleanup.
(a) A person subject to this section shall take all reasonable precautions to prevent or minimize the discharge of VOC into the atmosphere when cleaning process and coating application equipment, including containers, vessels, tanks, lines, and pumps.
(b) Reasonable precautions for equipment cleanup shall, at a minimum, include the following:
(i) Storing all wastes and waste materials, including cloth and paper that are contaminated with VOC, in closed containers;
(ii) Preparing written standard operating procedures for frequently cleaned equipment, including when practical, provisions for the use of low-VOC or non-VOC materials and procedures to minimize the quantity of VOC materials used;
(iii) Using enclosed spray gun cleaning, VOC-recycling systems and other spray gun cleaning methods where practical that reduce or eliminate VOC emissions; and
(iv) Using, when practical, detergents, high-pressure water, or other non-VOC cleaning options to clean coating lines, containers, and process equipment.
(4) VOC Storage and Transfer.
(a) A person subject to this section who stores VOCs shall, at a minimum, install conservation vents or other vapor control measures on storage tanks with a capacity of 2,000 gallons or more to minimize VOC emissions.
(b) A person subject to this section shall, at a minimum, utilize vapor balance, vapor control lines, or other vapor control measures when VOCs are transferred from a tank truck into a stationary storage tank with a capacity greater than 10,000 gallons and less than 40,000 gallons that store VOCs or materials containing VOCs, other than gasoline, that have a vapor pressure greater than 1.5 psia. “

Compliance Demonstration
The Permittee shall conduct facility-wide inspections at least once per calendar month to determine the compliance status of facility operations with regard to implementation of “good operating practices” designed to minimize emissions of VOC. **[Reference: COMAR 26.11.03.06C**]
The Permittee shall maintain:
(1) Written descriptions of all “good operating practices” designed to minimize emissions of VOC from facility-wide operations. **[Reference: COMAR 26.11.19.02I]**

(2) Records of all inspections conducted to determine the facility's compliance status with regard to implementation of "good operating practices" designed to minimize emissions of VOC from facility-wide operations. The records shall include for each inspection the name of the inspector, the date and time of the inspection, and an account of the findings. **[Reference: COMAR 26.11.03.06C]**

Good operating practices information as required by COMAR 26.11.19.02I shall be made available to the Department upon request

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Emission Units: EU3-1, EU3-2, EU3-3 Cont'd

EU 3-1: Shaping and Forming Equipment - General Exhaust.
EU 3-2: Drying Ovens ventilated through the oxidizer control system (OCS).
EU 3-3: Batch Ovens to Atmosphere.

Compliance Status

Per July 13, 2017 Full Compliance Inspection, facility personnel stated that a monthly leak inspection is conducted as part of their monthly Integrated Contingency Plan as well as daily leak checks on the tank farm. Leaks are repaired as quickly as possible after discovery. Leak inspection logs were made available to the Department during the compliance inspection.

Applicable Standards and limits:

Control of VOC Emissions

COMAR 26.11.19.16C - Control of VOC Leaks

General Requirements. "A person subject to this regulation shall comply with all of the following requirements:

(1) Visually inspect all components on the premises for leaks at least once each calendar month.

(2) Tag any leak immediately so that the tag is clearly visible. The tag shall be made of a material that will withstand any weather or corrosive conditions to which it may be normally exposed. The tag shall bear an identification number, the date the leak was discovered, and the name of the person who discovered the leak. The tag shall remain in place until the leak has been repaired.

(3) Take immediate action to repair all observed VOC leaks that can be repaired within 48 hours.

(4) Repair all other leaking components not later than 15 days after the leak is discovered. If a replacement part is needed, the part shall be ordered within 3 days after discovery of the leak, and the leak shall be repaired within 48 hours after receiving the part.

(5) Maintain a supply of components or component parts that are recognized by the source to wear or corrode, or that otherwise need to be routinely replaced, such as seals, gaskets, packing, and pipe fittings.
(6) Maintain a log that includes the name of the person conducting the inspection and the date on which leak inspections are made, the findings of the inspection, and a list of leaks by tag identification number. The log shall be made available to the Department upon request. Leak records shall be maintained for a period of not less than 2 years from the date of their occurrence."
COMAR 26.11.19.16D. Exceptions. "Components that cannot be repaired as required in this regulation because they are inaccessible, or that cannot be repaired during operation of the source, shall be identified in the log and included within the source's maintenance schedule for repair during the next source shutdown."

Compliance Demonstration
The Permittee shall:
(1) Visually inspect all components (process equipment, storage tanks, pumps, compressors, valves, flanges, pipeline fittings, pressure relief valves) at the facility for VOC leaks at least once each calendar month;
(2) Tag any VOC leak immediately with I.D. Number, the date VOC leak was discovered, and the name of the person who discovered the VOC leak. The tag is to remain in place until the VOC leak is repaired;
(3) Take immediate action to repair/control all observed VOC leaks that can be repaired within 48 hours;
(4) Repair all other VOC leaking components not later than 15 days after the VOC leak is discovered in accordance with COMAR 26.11.19.16C(4);
(5) If a replacement part is needed, it shall be ordered within 3 days after discovery of the VOC leak and the leak shall be repaired within 48 hours after receiving the part;
(6) Maintain a supply of components or component parts that are recognized by the source to wear or corrode, or that otherwise need to be routinely replaced; and
(7) Identify in a log components that cannot be repaired as required by this regulation because they are inaccessible, or that cannot be repaired during operation of the source, and include them within the source's maintenance schedule for repair during the next source shutdown.

[Reference: COMAR 26.11.19.16C and D]
The Permittee shall:
(1) Maintain a log that includes the name of the person conducting the inspection, the date on which VOC leak inspection was made, the findings of the inspection, a list of VOC leaks by tag identification number, the date the part was ordered, and the date the VOC leak was repaired; and

(2) Make the log available to the Department upon request and shall be maintained for a period of not less than two years from the date of the VOC leaks' occurrence.

[Reference: COMAR 26.11.19.16C(6)]

VOC Leak inspection logs as required by COMAR 26.11.19.16 shall be made available to the Department upon request.

Emission Units: EU3-2

EU3-2: Filled FPM Products Area vented through the oxidizer control system.

The oxidizer control system (OCS) includes the following oxidizers: SARA (oxidizer #1), TEC (oxidizer #2) and WILLIE (oxidizer #3). During normal running conditions, Willie and SARA are on line and taking process exhaust gas, while TEC oxidizer is off. TEC is used during emergency situations, and as backup when maintenance is required on WILLIE or SARA.

Compliance Status

During July 13, 2017 Full Compliance Inspection, SARA and TEC were controlling emissions, while WILLIE was not in operation. SARA was operating at 1661 ^{o}F, while TEC was operating at 1451 ^{o}F. Temperature records are maintained electronically. TEC was stack tested on June 16-17, 1998 and showed a destruction efficiency of 99.1% VOC. WILLIE most recent stack test was conducted on September 7, 2017 and showed a destruction efficiency of 98.30% VOC. SARA's most recent stack test was conducted on May 24-25, 2016 and showed a destruction efficiency of 99.34% VOC. Those percentages are greater than the 85% control efficiency required by COMAR 26.11.19.30E, therefore the oxidizers meet the regulatory requirement. No visible emissions were detected during the inspection.

Applicable Standards and limits:

A. Control of Visible Emissions

COMAR 26.11.06.02C(1) – Visible Emission Standards. "A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity."

COMAR 26.11.06.02A(2) – General Exception. "The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:
(a) The visible emissions are not greater than 40 percent opacity; and
(b) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period."

Compliance Demonstration

The Permittee shall visually inspect the exhaust of the oxidizer control system at least monthly for a 6-minute period when the process lines are in operation and shall record the result of each observation. If no visible emissions are observed in six consecutive monthly observations, the frequency of the visual observation may decrease from monthly to quarterly. If emissions are visible greater than 20 percent opacity from the oxidizer control system, the Permittee shall perform the following unless it can be shown through a Method 9 test, that the visible emissions are zero percent opacity:

(a) inspect all process and/or control equipment related to emission point;

(b) perform all necessary repairs and/or adjustments to the oxidizers, within 48 hours, so that visible emissions in the exhaust gases are less than 20 percent opacity; and

(c) document, in writing, the results of the inspections and the repairs and/or adjustments made to the oxidizers.

If visible emissions greater than 20 percent opacity have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation for 18-minutes once daily when the process lines are in operation until the visible emissions have been reduced to less than 20 percent opacity. **[Reference: COMAR 26.11.03.06C]**

The Permittee shall keep records of the results of visual emission observations and document any incidence of visible emissions and corrective action taken by the Permittee. **[Reference: COMAR 26.11.03.06C]**

The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, “Report of Excess Emissions and Deviations”

B. Control of VOC Emissions

COMAR 26.11.19.30E – General Requirements for FPM Process Installations

“(1) A person who owns or operates an FPM process installation that has actual uncontrolled VOC emissions of 50 pounds or more per day shall vent the emissions into a thermal oxidizer system or other control method approved by the Department to destroy or reduce VOC emissions by 85 percent or more, overall.

Compliance Demonstration

COMAR 26.11.19.30F. Demonstration of Compliance. “Compliance with this regulation shall be demonstrated using the applicable VOC test methods specified in COMAR 26.11.01.04C or other test method approved by the Department.”

The Permittee shall conduct performance testing of the primary oxidizer in the control system once during the 5-year term of the permit. [**Reference: COMAR 26.11.03.06C].**
(2) If a thermal oxidizer is installed, the oxidizer combustion chamber shall be:
(a) Operated at a minimum combustion chamber temperature of 1400°F or other temperature approved by the Department that is demonstrated to achieve compliance with this regulation;
(b) Equipped with a continuous temperature monitor to record the oxidizer temperature; and
(c) Equipped with an alarm system that alerts the operator when the oxidizer combustion chamber temperature is less than the approved temperature; and
(d) Equipped with an interlock system that prevents operation of the FPM installation unless the approved control system is operating.
(3) If a source uses an alternative control method approved by the Department, the alternative control method shall be monitored as required by the Department.
(4) Equipment that is installed for the purpose of treating emissions or monitoring shall be operated, maintained, and as applicable, calibrated in accordance with the equipment vendor's specifications.
(5) A person who owns or operates an FPM compounding and tape or shape-forming installation shall minimize fugitive emissions of VOC by:
(a) Immediately enclosing all wet FPM during storage; and
(b) Covering dipping troughs when not in operation.
(6) A person who owns or operates an FPM coating installation that has actual uncontrolled VOC emissions of 20 pounds or more per day may not use a coating that has a VOC content exceeding 2.9 pounds per gallon unless the installation is equipped with a control device that meets the requirements in §E(2), (3), and (4) of this regulation." [**Reference: COMAR 26.11.19.30E(2)]**
The following records shall be kept on site for a period of at least five (5) years except for the design data, which shall be retained permanently. The records shall be made available to the Department on request:
(1) Permanent records**,** for the life of the equipment**,** of pertinent design data for the control device including manufacturer specifications and/or vendor guarantees for the control device and catalyst, catalyst requirements, design space velocity, operating limits, volume and configuration of catalyst required;
(2) Maintenance records of types and dates of work performed on the oxidizer control system;
(3) Records of the combustion chamber temperature, which shall be greater than 1400 ^{o}F any time a controlled process line is in operation; and
(4) Records of the results of destruction efficiency tests.
(5) The Permittee shall keep records of the damper position and corresponding chamber temperature on site for at least five years.

(6) The Permittee shall keep records of the annual replacement of the thermocouples on site for at least five years. **[Reference: COMAR 26.11.03.06C]**

The Permittee shall submit a test protocol to the Department for approval at least 30 days prior to proposed date of the test. The Permittee shall report results of the performance testing to the Department within 45 days after completion of the test.

The Permittee shall make the records of the thermo couple checks made available to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

Compliance Assurance Monitoring (CAM) Requirements [40 CFR Part 64]

CAM is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on air pollution control (APC) equipment to achieve compliance. The CAM approach established monitoring for the purpose of:

(1) Documenting continued operation of the control measures within ranges of specified indicators of performances (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements;
(2) Indicating any excursions from these ranges; and
(3) Responding to the data so that the causes of or caused excursions are corrected.

In order for a unit to be subject to CAM, the unit must be located at a major source, be subject to an emission limitation or standard; use a control device to achieve compliance; have pre-control emissions of at least 100 percent of the major source amount; and must not otherwise be exempt from CAM. Applicability determinations are made on a pollutant-by-pollutant basis for each emission unit.

The Pollutant specific emission units (PSEU) consist of dryers and ovens that support the fluropolymers material (FPM) shaping and forming processes. The dryers and ovens are controlled by the Oxidizer Control System (OCS), which consist of three regenerative thermal oxidizers (RTO).

The dryers and ovens are used to drive off liquid (VOC and/or water) from the fluoropolymer materials or to add certain properties to the product. The dryers and ovens are ducted to the OCS and operate as a batch process on an as needed basis depending on production demands. All the dryers and ovens are interlocked with the OCS so that they can only operate when the OCS is at temperatures greater than 1400 ^{o}F or other temperature approved by the

Department. If temperatures approach 1400 ^{o}F (or other approved temperature), the alarm system will alert operators of low temperatures and if the low temperature is not corrected the OCS will go offline and production equipment will automatically be shutdown.

Rationale for selection of Performance Indicators
The OCS is used to reduce the VOC emissions generated from the evolution of VOCs from fluoropolymer materials.

"VOC destruction efficiency depends upon design criteria (i.e. chamber temperature, residence time, inlet VOC concentration, compound type, and degree of mixing). Thermal destruction of most organic compounds occurs between 590 ^{o}C and 650 ^{o}C (1100 ^{o}F and 1200 ^{o}F)." (EPA-CICA Fact Sheet: Thermal Incinerator).

Manufacture Design Criteria

OSC Components	Maximum gas flow rate inlet	VOC Destruction
Oxidizer #1 (SARA)	25,000 scfm	95 to 98%
Oxidizer #2 (TEC)	25,000 scfm	95 to 98%
Oxidizer #3 (WILLIE)	30,000 scfm	95 to 98%

RTOs utilize the opening and closing of dampers to routinely change the direction of airflow over the beds. This change of airflow direction helps improve mixing of the gases and maintains uniform temperature across the beds. Incomplete combustion in the RTO may be indicated by visible emissions from the stack.

In accordance with 40 CFR 64.4(b)(1) - Presumptively acceptable monitoring includes:
"Presumptively acceptable or required monitoring approaches, established by the permitting authority in a rule that constitutes part of the applicable implementation plan required pursuant to Title I of the Act, that are designed to achieve compliance with this part for particular pollutant-specific emissions units."
COMAR 26.11.19 achieves the requirements of Title I of the Clean Air Act, Section 110. State Implementation Plan (SIP) for VOC and requirement for this source is listed in COMAR 26.11.19.30E&F.

Rationale for selection of Indicator Ranges
Indicator ranges are based on requirements of the Maryland regulation and are supported by the stack testing data. VOC destruction of most organic compounds occurs between 1100 ^{o}F and 1200 ^{o}F. Results of the most recent stack tests are listed in the table below. Since TEC is used as a backup unit, it is not regularly tested; however it is on a regular preventative maintenance schedule just like the other units.

Test methods used to determine VOC destruction efficiency includes EPA Test Method 25A.

Stack Test Data

	Date of Compliance Demonstration	Combustion Temperature	Destruction Efficiency (average of 3 runs)
SARA, Oxidizer #1	5/25/2016	1250 ^{o}F	99.34%
TEC, Oxidizer #2	6/17/1998	~1600 ^{o}F	99.10 %
WILLIE, Oxidizer #3	9/7/2017	1640 ^{o}F	98.30 %

Monitoring Approach.

Table IV-6			
COMPLIANCE ASSURANCE MONITORING REQUIREMENTS – PART 64			
EU 3-2: Process Dryers and Ovens **Oxidizer Control System (OCS) consisting of the following:** **Regenerative Thermal Oxidizer #1 (SARA, CH62581);** **Regenerative Thermal Oxidizer #2 (TEC, CH2369);** **Regenerative Thermal Oxidizer #3 (WILLIE, CH60535)**			
Applicable Requirement	**VOC:**		
I. Indicator	**Combustion Zone Temperature**	**Visible Emissions**	**Stack Testing**
II. Measurement Approach	The combustion zone temperature is measured using thermocouples that are located within the	Periodic observations of the OCS stack can indicate if visible emissions	VOC Emissions are sampled using EPA Reference Method

	combustion zone.	are present.	25A, a continuous extractive sample (40 CFR 60 Appendix A)
III. Indicator Range	An excursion occurs when the combustion zone temperature drops below 1400 ^{o}F or other temperature approved by the Department, while processes are venting to the oxidizer. Audible and visual alarms will alert oxidizer operators to a temperature dropping below 1400 ^{o}F (or other Department approved temperature), and the oxidizer will automatically remove the permissive to operate from all users prior to the temperature reaching set point. An excursion will trigger an	Quarterly observations are performed for a 6-minute period, while process lines are in operation and being controlled by the OCS.	Stack Test must show a destruction efficiency of 85 percent or greater.

	investigation and corrective action, and if lasting longer than one hour, a reporting requirement.		
IV Performance Criteria			
A. Data Representativeness	The combustion zone temperatures are measured using thermocouples located within the combustion zone. The minimum accuracy of the thermocouple is ±2 degrees F.	A Method 9 visible emissions observation is performed.	See EPA Reference Method 25A.
B. Verification of Operational Status	N/A	N/A	See EPA Reference Method 25A
C. QA/QC Practices and Criteria	Annual replacement of the combustion zone thermocouples	N/A	See EPA Reference Method 25A.
D. Monitoring Frequency	The combustion zone temperature is monitored	Quarterly observations	The stack test is performed within 180 days of startup of unit.
E. Data Collection Procedures	Temperatures are recorded to a digital chart recorder. The data is saved	The 6-minute observation shall be documented	See EPA Reference Method 25A, the results are

	locally on a storage card and is also saved on network servers.	and maintained for a period of at least 5 years.	reported to the permitted authority.
F. Averaging Period	6-minute average	N/A	N/A

COMPLIANCE SCHEDULE

W.L. Gore & Associates, Inc. - Cherry Hill is currently in compliance with all applicable air quality regulations. or Discuss compliance plan and schedule when applicable.

TITLE IV – ACID RAIN

Not Applicable.

TITLE VI – OZONE DEPLETING SUBSTANCES

W.L. Gore & Associates, Inc.-Cherry Hill subject to Title VI requirements.

SECTION 112(r) – ACCIDENTAL RELEASE

W.L. Gore & Associates, Inc.-Cherry Hill is not subject to the requirements of Section 112(r). [If subject, state that an RMP has been submitted.]

PERMIT SHIELD

W.L. Gore & Associates, Inc.-Cherry Hill did request a permit shield. The Cherry Hill facility requested that a permit shield be expressly included in the Permittee's Part 70 permit. Permit shields are granted on an emission unit by emission unit basis. If an emission unit is covered by a permit shield, a permit shield statement will follow the emission unit table in Section IV - Plant Specific Conditions of the permit. In this case, a permit shield was granted for each emission unit covered by the permit.

INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. 6 Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

[For Areas I, II, V, and VI]

The *fuel burning units* are subject to the following requirements:

COMAR 26.11.09.05A(1), which establishes that the Permittee may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity.

Exceptions: COMAR 26.11.09.05A(2) does not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if:

(a) The visible emissions are not greater than 40 percent opacity; and

(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period.

[For Distillate Fuel Oil]

COMAR 26.11.09.07A(1)(c) which establishes that the Permittee may not burn, sell, or make available for sale any distillate fuel with a sulfur content by weight in excess of 0.3 percent.

(2) No. 1 Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving;

The *affected unit* is subject to the following requirements:

(A) COMAR 26.11.09.05E(2), Emissions During Idle Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(B) COMAR 26.11.09.05E(3), Emissions During Operating Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(C) Exceptions:

(i) COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(a) Engines that are idled continuously when not in service: 30 minutes
(b) all other engines: 15 minutes.

(iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.

(3) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(4) ✓ Water cooling towers and water cooling ponds unless used for evaporative cooling of water from barometric jets or barometric condensers, or used in conjunction with an installation requiring a permit to operate;

(5) Containers, reservoirs, or tanks used exclusively for:

(a) ✓ Storage of butane, propane, or liquefied petroleum, or natural gas;

(b) No. 30 Storage of lubricating oils;

(c) No. 13 Unheated storage of VOC with an initial boiling point of 300 °F (149 °C) or greater;

(d) No. 6 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(6) ✓ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a total cooking area of 5 square feet (0.46 square meter) or less;

(7) ✓ First aid and emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation used in support of a manufacturing or production process;

(8) ✓ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

(9) ✓ Laboratory fume hoods and vents;

For the following, attach additional pages as necessary:

(10) any other emissions unit, not listed in this section, with a potential to emit less than the "de minimus" levels listed in COMAR 26.11.02.10X (list and describe units):

General Category	Description	CH Nos.
Misc	Bag Dump Stations	0
Shaping	FM Line	45159
Shaping	Heat treat exhausts w/ IK dip	65128
Shaping	Tenter for wet tapes	2180
Forming	R&D ACIS	62347
Forming	R&D Jenny	62924

(11) any other emissions unit at the facility which is not subject to an applicable requirement of the Clean Air Act (list and describe):

General Category	Describe this equipment	CH Nos.
Conditioning	Pellet Oven	74820
Conditioning	Pellet Oven	1551361

General Category	Describe this equipment	CH Nos.
Conditioning	Pellet Oven	2166
Conditioning	Pellet Oven	2413
Conditioning	Pellet Oven	2443
Conditioning	Pellet Oven	2444
Conditioning	Pellet Oven	2445
Drying	Lab Ovens	2260
Drying	Lab Ovens	963
Drying	Lab Ovens	2211
Drying	Ovens	2573
Forming	Mixing and Compounding	1931985
Misc	Chem Storage Cabinets	0
Misc	Paint Booth	5800
Misc	Slitter	1058
Misc	Welding Hood	0
Shaping	Calendaring line	244
Shaping	Calendaring line	825
Shaping	Calendaring line	1367
Shaping	Calendaring line	1368
Shaping	Calendaring line	1693
Shaping	Calendaring line	2055
Shaping	Calendaring line	2070
Shaping	Calendaring line	74770
Shaping	Calendaring line	1342
Shaping	Calendaring line	183
Shaping	Calendaring line	2149
Shaping	Calendaring lines	2037
Shaping	Calendaring lines	2555
Shaping	Calendaring w/dip	242
Shaping	Calendaring w/dip	75616
Shaping	Calendaring lines	126
Shaping	Heat treat exhaust	62933
Shaping	Heat treat exhaust	74794
Shaping	Heat treat exhaust	853
Shaping	Heat treat exhaust	982
Shaping	Heat treat exhaust	1425
Shaping	Heat treat exhaust	1761
Shaping	Heat treat exhaust	2344
Shaping	Heat treat exhaust	61670
Shaping	Heat treat exhaust	1504863
Shaping	Heat treat exhaust	2310

STATE ONLY ENFORCEABLE REQUIREMENTS

This section of the permit contain state-only enforceable requirements. The requirements in this section will not be enforced by the U.S. Environmental Protection Agency. The requirements in this section are not subject to COMAR 26.11.03 10 - Public Petitions for Review to EPA Regarding Part 70 Permits.

1. Applicable Regulations:

   (a) COMAR 26.11.06.08 - Nuisance. "An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be construed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."

   (b) COMAR 26.11.06.09 – Odors. "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that nuisance or air pollution is created."

   (c) COMAR 26.11.15.05 - Control Technology Requirements**.**
   "A. New or Reconstructed Installations. A person may not construct, reconstruct, operate, or cause to be constructed, reconstructed, or operated, any new installation or source that will discharge a toxic air pollutant to the atmosphere without installing and operating T-BACT."

   (d) COMAR 26.11.15.06 - Ambient Impact Requirement.
   A. Requirements for New Installations, Sources, or Premises.
   (1) Except as provided in §A(2) of this regulation, a person may not construct, modify, or operate, or cause to be constructed, modified, or operated, any new installation or source without first demonstrating to the satisfaction of the Department using procedures established in this chapter that total allowable emissions from the premises of each toxic air pollutant discharged by the new installation or source will not unreasonably endanger human health.
   (2) If a new installation or source will discharge a TAP that is not listed in COMAR 26.11.16.07 and will be part of an existing premises, then emissions of that TAP from existing sources or existing installations on the premises may be omitted from a screening analysis unless the TAP is added to COMAR 26.11.16.07.

2. Record Keeping and Reporting:

   The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

   (a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

   (b) a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.